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EXAMINER	
WANG, SHENGJUN	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/909,862
Filing Date: July 20, 2001
Appellant(s): XUE ET AL.

Carol A. Egner
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed January 10, 2005.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existance of any related appeals and interferences.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 13-16 and 19-22 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

US Patent 5,756,538 Cassels et al. May 26, 1998

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 13-16, 19-22 are rejected under 35 U.S.C. 103(a) over Cassels et al.

These rejections are fully set forth in prior office action mailed March 30, 2004, and reiterated in full below.

(11) Response to Argument

1. Claims 13-16 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cassels et al. (US 5,756,538, IDS).

2. Cassels et al teaches a method of treating anxiety comprising administering to the patient an effective non-toxic amount of substituted flavonoid, particularly substituted flavone, wherein the substituents may be hydroxyl group or low alkyl alkoxyl groups. Cassels particularly prefer flavone wherein the 5, and 7 positions have hydroxyl substituents. See, particularly, the claims. note, chrysin, as claimed in claim 6 by Cassels et al. is 5, 7-dihydroxyflavone.

3. Cassels et al. does not teach expressly the employment of the flavone herein with R4 is a methoxyl groups, i,e. 5, 7-dihydroxy, 8-methoxyflavone (wogonine).

However, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to treat anxiety by employing a flavone with hydroxyl groups at 5, and 7, and a methoxyl group at 8 position (R4 as depicted by Cassels). A person of ordinary skill in the art would have been motivated to treat anxiety by employing a flavone with hydroxyl groups at 5, and 7, and a methoxyl group at 8 position (R4 as depicted by Cassels) because Cassels expressly prefer flavone with 5 and 7 dihydroxyl groups. Further, methoxyl group is known to be useful as a substituent at 8 position (R4). The selection of methoxyl group herein is seen to be a selection from amongst equally suitable functional groups and as such obvious. Ex parte Winters 11 USPQ 2nd 1387 (at 1388). Further, the optimization of a result effective parameter, e.g., the effective amount of a therapeutical agent, is considered within the skill of the artisan. See, In re Boesch and Slaney (CCPA) 204 USPQ 215.

It should be noted that the compound employed herein, wogonin, is an old and well-known compound found in herbs with very low toxicity. See, pages2 in the specification.

1. Appellants contend that the examiner has not established a prima facie case of obvious simply because the examiner did not follow the procedure in MPEP to consider all the Graham factors. The arguments are not convincing. In the prior office action, the examiner states "Cassels et al teaches a method of treating anxiety comprising administering to the patient an effective non-toxic amount of substituted flavonoid, particularly substituted flavone, wherein the substituents may be hydroxyl group or low alkyl alkoxyl groups. Cassels particularly prefer flavone wherein the 5, and 7 positions have hydroxyl substituents. See, particularly, the claims *(the scope and contents of the prior art)*.

5. Cassels et al. does not teach expressly the employment of the flavone herein with R4 is a methoxyl groups *(the different between the claimed invention and the prior art)*.

However, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to treat anxiety by employing a flavone with hydroxyl groups at 5, and 7, and a methoxyl group at 8 position (R4 as depicted by Cassels). A person of ordinary skill in the art would have been motivated to treat anxiety by employing a flavone with hydroxyl groups at 5, and 7, and a methoxyl group at 8 position (R4 as depicted by Cassels) because Cassels expressly prefer flavone with 5 and 7 dihydroxyl groups. Further, methoxyl group is known to be useful as a substituent at 8 position (R4) *(object evidence of obviousness)*. The selection of methoxyl group herein is seen to be a selection from amongst equally suitable functional groups and as such obvious. Ex parte Winters 11 USPQ 2nd 1387 (at 1388). Further, the optimization of a result effective parameter, e.g., the effective amount of a therapeutical agent, is considered within the skill of the artisan. See, In re Boesch and Slaney (CCPA) 204 USPQ 215 *(level of ordinary skill in the art)*.

In response to appellant's argument that there is no express teaching or motivation to reach the particular subject matter herein claimed, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) And *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the suggestion or motivation is found both in the prior art and the knowledge generally available to one of ordinary skill in the art.

Particularly, "The selection of methoxyl group herein is seen to be a selection from amongst equally suitable functional groups and as such obvious. Ex parte Winters 11 USPQ 2nd 1387 (at 1388)." Further, question under 35 U.S.C. 103 is not merely what a reference expressly teaches, but what they would have suggested to one of ordinary skill in the art at the time the invention was made; all disclosures of prior art, including unpreferred embodiments, must considered. In re Lamberti and Konort (CCPA), 192 USPQ 278.

Therefore, a prima facie case of obviousness has been established. Appellants further contend that it is incorrect to assume that "The selection of methoxyl group herein is seen to be a selection from amongst equally suitable functional groups," but fail to provide any factual evidence showing wogonin is different from those disclosed by Cassels et al. There is no objective evidence to rebut the prima facie case of obviousness.

Appellants argue that different substituents on the flavone render substantially varied biological activity (the efficacy) of the flavone, citing the data disclosed by Cassels et al. Appellants also present exhibit A, an article published after the filing data, showing the activity of 5,7-dihydrioxy, 8-methoxy flavone and 5,8-dihydroxy, 7-methoxy flavone are drastically different in term of the bioactivity. The *arguments* are not persuasive. First, the efficacy may be different, but the compounds within the prior art disclosed scope would have reasonably been expected to be useful for treating anxiety. The difference is only the efficacy, which is a difference in degree, not in kind. Further, the exhibit is moot to the issue since it was published after the effective filing date.

For the above reasons, it is believed that the rejections should be sustained.

SHENGJUN WANG
PRIMARY EXAMINER

Respectfully submitted,

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Primary Examiner
Art Unit 1617

March 31, 2005

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